

AMENDMENT TO THE CLAIMS

This listing of the claims will replace all prior versions, and listings, of claims in the application.

What Is Claimed Is:

1. (Previously Presented) A method for forming a semiconductor device comprising
the steps of:
depositing a monoatomic film including a metal on a base by using a metal source including a compound containing said metal and no oxygen; and
depositing a metal oxide film including oxide of said metal on said monoatomic film by using a CVD technique.
2. (Original) The method according to claim 1, further comprising, before said monoatomic film depositing step, the step of supplying oxidizing gas onto a surface of said base.
3. (Original) The method according to claim 2, wherein said oxidizing gas includes heated H₂O.
4. (Original) The method according to claim 2, wherein said oxidizing gas includes at least one gas selected from the group consisting O₂, active oxygen, ozone, and N₂O.

5. (Original) The method according claim 1, further comprising, before said monoatomic film depositing step, the step of supplying hydrofluoric acid onto a surface of said base.
6. (Original) The method according to claim 1, wherein said metal source includes at least one said compound selected from the group consisting of TaCl_5 , TaF_5 and $\text{Ta}(\text{N}(\text{C}_2\text{H}_5)_2)_3$, and said metal oxide film is tantalum oxide.
7. (Original) The method according to claim 1, wherein said metal source includes $\text{Al}(\text{CH}_3)_3$, and said metal oxide is titanium oxide.
8. (Original) The method according to claim 1, wherein said metal source includes TiCl_4 or $\text{Ti}(\text{N}(\text{CH}_3)_2)_4$ and said metal oxide is titanium oxide.
9. (Original) The method according to claim 1, wherein said metal source includes at least one said compound selected from the group consisting of $\text{Hf}(\text{NCH}_3)_2)_4$, $\text{Hf}(\text{N}(\text{C}_2\text{H}_5)(\text{CH}_3))_4$ and $\text{Hf}(\text{C}_2\text{H}_5)_2)_4$, and said metal oxide is hafnium oxide.
10. (Original) The method according to claim 1, wherein said metal source includes at least one said compound selected from the group consisting of NbCl_5 , NbF_5 and $\text{Nb}(\text{N}(\text{C}_2\text{H}_5)_2)_3$, and said metal oxide is niobium oxide.

Appl. No. 10/808,193

11. (Original) The method according to claim 1, further comprising, between said monoatomic film depositing step and said metal oxide film depositing step, the step of supplying oxidizing gas onto a surface of said monoatomic film.

12. (Original) The method according to claim 12, wherein said base is either silicon substrate, polysilicon film, silicon nitride film or a metallic film.

13. (Original) The method according to claim 1, further comprising the step of forming a conductive film on said metal oxide film, wherein said steps are used for forming a capacitor including said base as a bottom electrode, said metal oxide film as a capacitor insulation film, and said conductive film as a top electrode.

14. (Previously Presented) A method for forming a semiconductor device comprising:

depositing a monoatomic film including a metal on a base in an oxygen-free environment; and

depositing a metal oxide film including an oxide of the metal on the monoatomic film using a CVD technique.

15. (Previously Presented) The method of claim 14, wherein the semiconductor device is adapted to function as a capacitor.

16. (Previously Presented) The method of claim 14, wherein the depositing of the monoatomic film including the metal includes using a metal source including a compound containing the metal.

17. (Currently Amended) A semiconductor device formed by a method, the method comprising:

depositing a monoatomic film including a metal on a base in an oxygen-free environment; and

depositing a metal oxide film including an oxide of the metal on the monoatomic film using a CVD technique.

18. (Previously Presented) The semiconductor device of claim 17, wherein the semiconductor device is adapted to function as a capacitor.